AS: Data Science 2021-2022

Data scientists require knowledge in a variety of information technology sub-fields, including algorithms, data structures, programming languages and statistical methods. While the field of Data Science is computer science centric, statistical and domain expertise is required. Accordingly, the data scientist may specialize in various fields, including business, physics, biology, finance and economics.

The Data Science AS gives students the skills to analyze, procure, store and process large amounts of data. The study of Data Science will have students dealing with data that comes from disparate sources in the modern context of the Internet, in various unstructured forms and across academic disciplines.

Program Courses

Course No.	Course Title	Credits
CSCI1040	Fundamentals of Structured Query Language (SQL)	3
CSCI1130	Introduction to Programming in Java (CS0)	4
CSCI2001	Object Oriented Programming (CS1)	4
CSCI2011	Programming in Python	1
CSCI2030	Database Modeling and Design	4
DSCI2001	Data Science I	4
DSCI2002	Data Science II	4
DSCI 2009	Interdisciplinary Applications in Data Science	2

Program Electives

Course No.	Course Title	Credits		
Choose 1 course from the following:				
CSCI1150	Programming in C# for .NET or	4		
CSCI1180	Introduction to Linux Operating System or	4		
CSCI2002	Data Structures and Algorithms or	4		
CSCI2010	Descrete Mathematical Structures	4		
MATH2000	Descrete Mathematical Structures	4		

General Education Courses

Course No.	Course Title	Credits		
College Writing I - 1 course:				
ENGL1200	Gateway College Writing or	4		
ENGL1201	College Writing I	4		
College Writing II:				
ENGL1202	College Writing II	2		
COMM1010 or COMM1210 - 1 Course:				
COMM1010	Fundamentals of Public Speaking or	3		
Natural Science: 1 course with a lab - 4 credits				
Physics, Chemistry, or Biology Recommended				
ECON 1060, ECON 1070, PSYC 1150 - 1 course:				
ECON1060	Principles of Macroeconomics or	3		
ECON1070	Principles of Microeconomics <i>or</i>	3		
Mathematics - 7 credits				
MATH1150	College Algebra	3		
MATH1210	Applied Statistics	4		
Goal Areas 6-10				
Any classes meeting MnTC Goals 6, 7, 8, 9, 10				

Total Credit Required 60

Degree Information

The Associate of Science (A.S.) degree is intended for students whose primary goal is to complete the credentials for a specific career and/or prepare for transfer to complete a bachelor's degree at a college or university with whom North Hennepin Community College has an articulation agreement. The A.S. degree provides a balance of general education courses and the required scientific, professional or technical courses in the degree program.

A student shall:

Earn a minimum of 60 semester credits as required in the program, with a grade point average of 2.00 (C) or above in courses taken at North Hennepin Community College. Specific programs may have additional requirements or a higher minimum grade point average.

Earn a minimum of 15 semester credits at North Hennepin Community College. A student must complete at least 50% of career specific courses at North Hennepin Community College.

Earn 30 credits in at least 6 Minnesota Transfer Curriculum (MnTC) goal areas. Earn 30 professional/technical credits. Have four years to complete the graduation requirements as published in the catalog in effect at the time of their initial enrollment. Students taking more than four years to complete their graduation requirements may follow any catalog published during the four-year period preceding their graduation.

Completion of an A.S. degree fulfills the Goal Area 2 requirement of the Minnesota Transfer Curriculum (MnTC).

Developmental Courses

Some students may need preparatory course(s) in Math and/or English. Courses numbered below 1000 will not apply toward a degree.

Equal Opportunity Employer and Disability Access Information

North Hennepin Community College is a member of Minnesota State Colleges and Universities system and an equal opportunity employer and educator. This document is available in alternative formats to individuals with disabilities by calling 763-493-0555 or through the Minnesota Relay Service at 1-800-627-3529.

Transfer Information

If you are planning on transferring to another institution, follow the guidelines available on our transfer resources web page to help you plan the process: <u>Transfer Information</u>

Career Opportunities

Information on careers, including salary and employment outlook data, is available on the iseek and Bureau of Labor Statistics websites: www.iseek.org and <a href="https://ww